IN THE CLAIMS:

Please cancel claim 2 without prejudice or disclaimer.

Please amend claims 1 and 12 and add new claims 23-40 as shown in the attached LISTING OF CLAIMS.

LISTING OF CLAIMS

Claim 1 (currently amended): An etching method comprising:

an etching gas supply step of supplying an etching gas through a gas supply system into a plasma producing chamber;

a plasma producing step of producing radicals in the plasma producing chamber by converting the etching gas into a plasma by applying radio frequency power to the etching gas; and

an etching step of etching an object to be processed in a reaction chamber, which is connected to the plasma producing chamber and is evacuated, by the radicals flowing from the plasma producing chamber into the reaction chamber;

wherein the etching gas is supplied through the gas supply system at an etching gas supply rate of 8.4 sccm or above for a substantial volume of one liter of the reaction chamber, a flow of etchant is provided at a flow rate which produces a flow diverging position with respect to an outer periphery of an object being etched that is substantially at or internal to the outer periphery of the object being etched, [and]

the process pressure is about 5 to about 10 mTorr, and wherein the plasma producing step converts the etching gas into a plasma by inductive coupling using an induction coil.

Claim 2 (canceled)

Claim 3 (original): The etching method according to claim 1, wherein the etching step uses chlorine gas as the etching gas and etches a polysilicon film formed on the object to be processed.

Claim 4 (original): The etching method according to claim 1, wherein the etching gas supply rate is 8.4 sccm to 16.9 sccm for a substantial volume of one liter of the reaction chamber.

Claim 5 (original): The etching method according to claim 2, wherein the etching gas supply rate is 8.4 sccm to 16.9 sccm for a substantial volume of one liter of the reaction chamber.

Claim 6 (original): The etching method according to claim 3, wherein the etching gas supply rate is 8.4 sccm to 16.9 sccm for a substantial volume of one liter of the reaction chamber.

Claim 7 (cancelled)

Claim 8 (previously amended): An etching method, comprising:

an etching gas supply step of supplying an etching gas through a gas supply system into a plasma producing chamber;

a plasma producing step of producing radicals in the plasma producing chamber by converting the etching g as into a plasma by applying radio frequency power to the etching gas; and

an etching step of etching an object to be processed in a reaction chamber, which is connected to the plasma producing chamber and is evacuated, by the radicals flowing from the plasma producing chamber into the reaction chamber;

wherein the etching gas is supplied through the gas supply system at an etching gas supply rate of 8.4 sccm or above for a substantial volume of one liter of the reaction chamber,

the plasma producing step converts the etching gas into a plasma by inductive coupling using an induction coil, and

a flow of etchant is provided at a flow rate which produces a flow diverging position with respect to an outer periphery of an object being etched that is substantially at or internal to the outer periphery of the object being etched.

Claim 9 (previously amended): The etching method according to claim 3, wherein a flow of etchant is provided at a flow rate which produces a flow diverging position that is internal to an outer periphery of an object being etched.

Claim 10 (previously amended): The etching method according to claim 4, wherein a flow of etchant is provided at a flow rate which produces a flow diverging position that is internal to an outer periphery of an object being etched.

Claim 11 (cancelled)

Claim 12 (currently amended): The etching method according to claim ~~11~~ 1 wherein the process pressure is 5 mTorr.

Claims 13 and 14 (cancelled)

Claim 15 (previously presented): The etching method according to claim 8, wherein the etching step uses chlorine gas as the etching gas and etches a polysilicon film formed on the object to be processed.

Claim 16 (previously presented): The etching method according to claim 8, wherein the etching gas supply rate is 8.4 sccm to 16.9 sccm for a substantial volume of one liter of the reaction chamber.

Claim 17 (previously presented) The etching method according to claim 15, wherein the etching gas supply rate is 8.4 sccm to 16.9 sccm for a substantial volume of one liter of the reaction chamber.

Claim 18 (previously presented): The etching method according to claim 15, wherein a flow of etchant is provided at a flow rate which produces a flow diverging position that is internal to an outer periphery of an object being etched.

Claim 19 (previously presented): The etching method according to claim 16, wherein a flow of etchant is provided at a flow rate which produces a flow diverging position that is internal to an outer periphery of an object being etched.

Claim 20 (previously presented): The etching method according to claim 8 wherein the process pressure is about 5 to about 10 mTorr.

Claim 21 (previously presented): The etching method according to claim 20 wherein the process pressure is 5 mTorr.

Claim 22 (previously presented): The etching method according to claim 15 wherein the process pressure is about 5 to about 10 mTorr.

Claim 23 (new): The etching method according to claim 1 wherein the etching gas supply rate is 250 sccm or more.

Claim 24 (new): The etching method according to claim 1 wherein the etching gas supply rate is 500 sccm or more.

Claim 25 (new): The etching method according to claim 1 wherein the etching gas supply rate is from 250 sccm to 1000sccm.

Claim 26 (new): The etching method according to claim 1 wherein the etching gas supply rate is from 500 sccm to 1000sccm.

Claim 27 (new): The etching method according to claim 1 wherein said etching method is carried out on a 12-inch wafer.

Claim 28 (new): The etching method according to claim 1 wherein the etching gas type is limited to chlorine gas.

Claim 29 (new): The etching method according to claim 1 wherein etching gas is passed through a shower head before contact with the substrate.

Claim 30 (new): The etching method according to claim 1 wherein the support supporting the object being etched is free of an electrode for pulling ions.

Claim 31 (new): An etching method comprising:

an etching gas supply step of supplying an etching gas through a gas supply system into a plasma producing chamber;

a plasma producing step of producing radicals by converting the etching gas into a plasma by induction coupling within the plasma producing chamber; and

an etching step of etching an object to be processed in a reaction chamber of a larger dimension than said plasma producing chamber, which plasma chamber is connected

to the plasma producing chamber and is evacuated, by the radicals that diffuse from the plasma producing chamber into the reaction chamber;

wherein the etching gas is supplied through the gas supply system at an etching gas supply rate of 8.4 sccm or above for a substantial volume of one liter of the reaction chamber, and wherein the etching gas and radicals flow down to an object being etched, and the flow of etchant is provided at a flow rate which produces a flow diverging position with respect to an outer periphery of an object being etched that is substantially at or internal to the outer periphery of the object being etched, and the process pressure is about 5 to about 10 mTorr.

Claim 32 (new): The etching method according to claim 31 wherein the etching gas supply rate is 250 sccm or more.

Claim 33 (new): The etching method according to claim 31 wherein the etching gas supply rate is 500 sccm or more.

Claim 34 (new): The etching method according to claim 31 wherein the etching gas supply rate is from 250 sccm to 1000 sccm.

Claim 35 (new): The etching method according to claim 31 wherein the etching gas supply rate is from 500 sccm to 1000 sccm.

Claim 36 (new): The etching method according to claim 31 wherein said etching method is carried out on a 12-inch wafer.

Claim 37 (new): The etching method according to claim 31 wherein the etching gas type is limited to chlorine gas.

Claim 38 (new): An etching method comprising:

an etching gas supply step of supplying an etching gas through a gas supply system into a plasma producing chamber;

a plasma producing step of producing radicals in the plasma producing chamber by converting the etching gas into a plasma by applying radio frequency power to the etching gas; and

an etching step of etching an object to be processed in a reaction chamber, which is connected to the plasma producing chamber and is evacuated, by the radicals flowing from the plasma producing chamber into the reaction chamber;

wherein the etching gas is supplied through the gas supply system at an etching gas supply rate of 8.4 sccm or above for a substantial volume of one liter of the reaction chamber, and wherein the flow of etching gas is provided at a flow rate of 250 sccm to 1000 sccm.

Claim 39 (new): The method of claim 38 wherein the flow rate is 500 sccm to 1000 sccm.

Claim 40 (new): An etching method comprising:

an etching gas supply step of supplying an etching gas through a gas supply system into a plasma producing chamber;

a plasma producing step of producing radicals in the plasma producing chamber by converting the etching gas into a plasma by applying radio frequency power to the etching gas; and

an etching step of etching an object to be processed in a reaction chamber, which is connected to the plasma producing chamber and is evacuated, by the radicals flowing from the plasma producing chamber into the reaction chamber;

wherein the etching gas is supplied through the gas supply system at an etching gas supply rate of 8.4 sccm or above for a substantial volume of one liter of the reaction chamber, and wherein the flow of etching gas is provided at a flow rate of 500 sccm or above.